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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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09/989,650

11/21/2001

Hyun-Chul Seo

P56617

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7590

09/21/2005

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EXAMINER

FERRIS, DERRICK W

ART UNIT

PAPER NUMBER

2663

DATE MAILED: 09/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/989,650

Applicant(s)

SEO, HYUN-CHUL

Examiner

Derrick W. Ferris

Art Unit

2663

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 November 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21, 23-26, 28 is/are rejected.
- 7) ☒ Claim(s) 22, 27, 29 and 30 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. **Claims 1-18** are rejected under 35 U.S.C. 101 because the invention is claiming a data structure per se. Claim 1-18 (and in particular independent claims 1 and 10) disclose a subscriber profile, a path profile and a quality of service; with pointers to link the profile to require information necessary to setup a label switch path. The current invention fails to disclose a post computer process or a pre computer process activity. Thus the claims recite a data structure per se. Hence the examiner agrees with the findings of the Chinese Office action filed January 2004 with respect to independent claims 1 and 10.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 19-21, 23-26 and 28** are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,768,738 B1 to *Yazaki et al.* ("*Yazaki*") in view of U.S. Patent Application 2002/0181485 A1 to *CAO et al.* ("*CAO*").

As such to **claim 19**, *Yazaki* discloses a setup request as a received packet (with header) and a profile entry indexes as the list table addresses shown e.g., in figure 9.

Also shown in figure 9 is interlinking created profile entries in accordance with the received profile and indexes since the flow conditions 511-n are organized based on the linked-lists. Figure 11 teaches checking a quality of service (QoS) index field to determine whether a linked QoS profile entry is present e.g., in step 621-6. If all the conditions are met then the further step of setting up the LSP based on the determination is taught when the deliver priority portion is read out in step 610 and 611.

Yazaki is silent or deficient to the further limitation of teaching MPLS and in particular a LSP setup request as recited in the claim. In particular, *Yazaki* teaches detecting packet flows where MPLS is a type of “flow”.

CAO teaches the further recited limitation above start at e.g., paragraph 0026 on page 3 with respect to a request message.

The proposed modification of the above-applied reference(s) necessary to arrive at the claimed subject matter would be to modify *Yazaki* by clarifying that packet flows are LSP flows.

As such, examiner notes that it would have been obvious to one skilled in the art prior to applicant's invention to include the above limitation. In particular, the motivation for modifying the reference or to combine the reference teachings would be layer two switching in order to improve network performance. In particular, *CAO* cures the above-cited deficiency by providing a motivation found at e.g., paragraph 0009 on page 2. Second, there would be a reasonable expectation of success since both references teach routing packets. Thus the references either in singular or in combination teach the above claim limitation(s).

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As to **claim 20**, the profiles in figure 9 are linked profiles as taught by the link table addresses.

As to **claim 21**, the flow conditions as taught by *Yazaki* do not include constraint based routing per se (CR-LSP). *CAO* teaches CL-LSP at e.g., paragraph 0025 on page 3. Thus the combined rejection sets up a LSP based on the detection contents of the index field meeting the limitation. Examiner furthermore notes that the same motivation applies as above for claim 19.

As to **claim 23**, the LSP is registered since the flow is established.

As to **claim 24**, the flow conditions as taught by *Yazaki* do not include FEC information, see e.g., figure 9. However, based on the combined rejection the tabled would contain FEC information since FEC information is native to MPLS as taught e.g., paragraph 0023 on page 3 of *CAO*. Examiner furthermore notes that the same motivation applies as above for claim 19.

As to **claim 25**, see similar rejection to claim 19 where the release request is working in reverse of the setup request.

As to **claim 26**, see similar rejection to claim 21.

As to **claim 28**, see similar reasoning to claim 24.

Allowable Subject Matter

5. **Claims 22, 27 and 29-30** objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Derrick W. Ferris whose telephone number is (571) 272-3123.

The examiner can normally be reached on M-F 9 A.M. - 4:30 P.M. E.S.T.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on (571)272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


DWF

Derrick W. Ferris
Examiner
Art Unit 2663


DERRICK FERRIS
PATENT EXAMINER